

REMARKS/ARGUMENTS

In an Office Action dated October 8, 2003, claims 1-18, 38-45, 55-64, 70-77, 85 and 87 were rejected. Claims 19-37, 46-54, 65-69, 78-84, 86, and 88-91 were objected to. By this amendment, claims 1, 14, 38, 55, 70, and 85 have been amended. Claims 1-91 remain pending.

I. Claim Rejections – 35 USC § 102

Claims 1-18, 38-45, 55-64, 70-77, 85, and 87 were rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,559,598 (the Matsumoto reference). The Examiner asserts, in part, that the Matsumoto reference “teaches the claimed feature such as first and second sets of gratings are intended to be formed on the wafer with an intended asymmetrical alignment, as in figure 3-4, when the position of the two diffraction gratings, serving as misalignment detection marks, on the surface of the wafer 6, the positions of the diffracted light beams change little, accordingly, the amount of relative misalignment between the diffraction gratings 7a and 7b is obtained in equation 13.”

Claim 1 has been amended to recite, in part, “the first and second sets of gratings are intended to be formed on the wafer with an intended asymmetrical alignment when the first mask and second mask are in alignment.” Claim 38 has been amended to recite, in part, “the second set of gratings are intended to be formed on the wafer with an intended asymmetrical alignment from the first set of gratings when the separate masks are in alignment.” Claim 55 has been amended to recite, in part, “the first and second sets of gratings were intended to be formed on the wafer with an asymmetric alignment when the first mask are in alignment.” Claim 70 has been amended to recite, in part, “the first and second sets of gratings are intended to be formed with an asymmetric alignment when the first mask and second mask are in alignment.” Claim 85 has been amended to recite, in part, “the first and second sets of gratings were intended to be formed on the wafer with an asymmetric alignment when the first mask and second mask are in alignment.”

In contrast, the diffraction gratings 7a and 7b in the Matsumoto reference were intended to be formed in alignment when there is no misalignment. More particularly, in the Matsumoto reference, Δx represents the amount of misalignment. (See column 2, lines 45-50). Thus, with

BEST AVAILABLE COPY

Application No.: 10/066,555

23

Docket No.: 509982003300

reference to FIG. 4 of the Matsumoto reference, when there is no misalignment (i.e., $\Delta x=0$), gratings 7a and 7b are formed aligned (i.e., $X_a=X_b$).

Thus, Applicants assert that the Matsumoto reference does not anticipate independent claims 1, 38, 55, 70, and 85. Moreover, Applicants assert that the Matsumoto reference teaches away by teaching that gratings 7a and 7b are formed aligned when there is no misalignment.

Therefore, Applicants assert that claims 1, 38, 55, 70, and 85 are allowable over the Matsumoto reference. Additionally, Applicants assert that claims 2-37, 39-54, 56-69, 71-84, and 86-91, which variously depend from claims 1, 38, 55, 70, and 85, are allowable for at least the reason that they depend from allowable independent claims.

II. Allowable Subject Matter

The examiner objected to claims 19-37, 46-54, 65-69, 78-84, 86, and 88-91 as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. As set forth above, Applicants assert that the base claims are allowable over the Matsumoto reference, and thus, claims 19-37, 46-54, 65-69, 78-84, 86, and 88-91 are also allowable over the Matsumoto reference for at least the reason they depend from allowable independent claims.

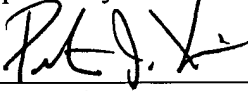
BEST AVAILABLE COPY**CONCLUSION**

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue. If it is determined that a telephone conference would expedite the prosecution of this application, the Examiner is invited to telephone the undersigned at the number given below.

In the event the U.S. Patent and Trademark office determines that an extension and/or other relief is required, Applicant petition for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 03-1952 referencing docket no. 509982003300. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Dated: January 7, 2004

Respectfully submitted,

By 

Peter J. Yim

Registration No.: 44,417
MORRISON & FOERSTER LLP
425 Market Street
San Francisco, California 94105
(415) 268-6373